

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of.)	
)	
CHIEN HO, et al.)	Group Art Unit:
)	
Serial No.: 09/598,218)	Examiner:
)	
Filed: June 21, 2000)	
)	
For: LOW OXYGEN AFFINITY)	
<u>MUTANT HEMOGLOBINS</u>)	

INFORMATION DISCLOSURE STATEMENT
UNDER 37 C.F.R. § 1.97(b)

Commissioner for Patents
Washington, DC 20231

Dear Sir:

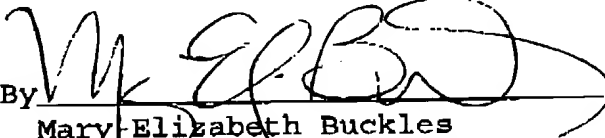
In compliance with the duty of disclosure as defined in 37 C.F.R. § 1.56 enclosed herewith for the Examiner's consideration is a copy of the publication listed on the attached Form PTO-1449. This statement is made pursuant to 37 C.F.R. § 1.97(b) since a first Office Action on the merits has not been mailed in the above-identified application.

This Information Disclosure Statement under 37 C.F.R. § 1.97 is not to be construed as a representation that:

(1) additional information material to the examination of this application does not exist; (2) the information, protocols,

results and the like reported by third parties are accurate or enabling; or (3) the above information constitutes prior art to the subject invention.

Respectfully submitted,

By 
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Filed: December 22, 2000

FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE
(MODIFIED) PATENT AND TRADEMARK OFFICE

INFORMATION DISCLOSURE
STATEMENT BY APPLICANT

(Use several sheets if necessary)

(37 CFR 1.96(b))

ATTY. DOCKET NO.
002547/20118

SERIAL NO.
09/598,218

APPLICANT
Chien Ho, et al.

FILING DATE
June 21, 2000

GROUP

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	TAB	PATENT NUMBER							ISSUE DATE	PATENTEE	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	1	5	7	5	3	4	6	5	5/19/98	Ho, et al.			
	2	5	8	4	3	8	8	8	12/1/98	Ho, et al.			

FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION

	DOCUMENT NUMBER	PUBLICATION DATE	COUNTRY OR PATENT OFFICE	CLASS	SUBCLASS	TRANSLATION	
						YES	NO

OTHER DOCUMENTS (Including Author, Title, Date, Relevant Pages, Place of Publication)

3	Dickerson, R.E., et al. <u>Hemoglobin: Structure, Function, Evolution, and Pathology</u> , pp 22-24, Benjamin/Cummings, Menlo Park, CA (1983)
4	Mulder, A.G., et al., <u>J. Cell Comp. Physiol.</u> 5:383 (1934)
5	Bunn, H.F., et al. <u>J. Exp. Med.</u> 129:909 (1969)
6	Chada, K., et al., <u>Nature (London)</u> 314:377 (1985)
7	Townes, T. M., et al. <u>EMBO J.</u> 4:1715 (1985)
8	Swanson, M.E., et al. <u>Bio/Technology</u> 10:557 (1992)
9	Groebe, D.R., et al., <u>Protein Expression and Purification</u> 3:134 (1992)
10	Wagenbach, M., et al. <u>Bio/Technology</u> 9:57 (1991)
11	DeLiano, J.J., et al. <u>Proc. Natl. Acad. Sci. USA</u> 90:918 (1993)
EXAMINER	
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EXAMINER: Initial citation considered. Draw line through citation if not in conformance and not considered.
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[illegible]

OTHER DOCUMENTS (Including Author, Title, Date, Relevant Pages, Place of Publication)

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary) (37 CFR 1.96(b))		APPLICANT Chien Ho, et al.	
		FILING DATE June 21, 2000	GROUP

U.S. PATENT DOCUMENTS											
EXAMINER INITIAL	TAB	PATENT NUMBER						ISSUE DATE	PATENTEE	CLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION													
		DOCUMENT NUMBER						PUBLICATION DATE	COUNTRY OR PATENT OFFICE	CLASS	SUBCLASS	TRANSLATION YES NO	

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18	Shaanan, B., et al. <u>J. Mol. Biol.</u> 171:31 (1983)
19	Schneider, R. G., et al. <u>Biochim. Biophys. Acta.</u> 400:365 (1975)
20	Bonaventura, J., et al. <u>J. Biol. Chem.</u> 243:980 (1968)
21	Perutz, M.F. <u>Nature</u> 228: 726 (1970)
22	Baldwin, J.M., et al. <u>J. Mol. Biol.</u> 129: 175 (1979)
23	Baldwin, J.M., <u>J. Mol. Biol.</u> 136: 103 (1980)
24	Fermi, G., et al. <u>J. Mol. Biol.</u> 175: 159 (1984)
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	31	Kim, H.-W., et al. <u>Biochemistry</u> 35:6620-6627 (1996)
	32	Ho, C., et al. <u>Blood Substitutes: Present and Future Perspectives of Blood Substitutes</u> (Tsuchida, E., Ed.), Elsevier Science SA, Lausanne, Switzerland, pp. 281-296 (1998)
	33	Kim, H.-W., et al., <u>J. Mol. Biol.</u> 248:867 (1995)
	34	Carver, T.E., et al. <u>J. Biol. Chem.</u> 267: 14443 (1992)
	35	Brantley, R.E. Jr., et al. <u>J. Biol. Chem.</u> 268: 6995 (1993)
	36	Eich, R.F., et al. <u>Biochemistry</u> 35: 6976 (1996)
	37	Doherty, D.H., et al. <u>Nature Biotech.</u> 16: 672 (1998)
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December 22, 2000 11:17 AM

FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE (MODIFIED) PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO.	SERIAL NO.
	002647/20118	09/598,218
INFORMATION DISCLOSURE STATEMENT BY APPLICANT	APPLICANT	
(Use several sheets if necessary)	Chien Hó, et al.	
(37 CFR 1.96(b))	FILING DATE June 21, 2000	GROUP

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	38	Fung, L.W.-M., et al. <u>Biochemistry</u> 14:2526 (1975)
	39	Russu, I.M., et al. <u>Biochem. Biophys. Acta</u> 914:40 (1987)
	40	Puius, T.A., et al. <u>Biochemistry</u> 37: 9258 (1998)
	41	Shen, T.-J., et al. <u>Protein Eng.</u> 10: 1085 (1997)
	42	Kunkel, T.M. et al., <u>Proc. Natl. Acad. Sci. USA</u> 82:488 (1985)
	43	Hayashi, A., et al. <u>Biochem. Biophys. Acta</u> 310:309 (1973)
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